

## MANAGING A LAYERED HIERARCHICAL DATA SET

### ABSTRACT OF THE DISCLOSURE

5           The present invention relates to managing a layered hierarchical data set.

According to one or more embodiments of the present invention, a hierarchical data set has a state attribute associated with each data element in the hierarchy. When a user accesses data element in the hierarchical data set, a sub-tree of the hierarchical data is presented to the user. When the user operates on a data element, the state attribute of the

10   node associated with the data element is updated. Using the updated state attribute, the entire hierarchical data set is managed so that when a user accesses the data again, it is presented correctly.